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(54) Clamp-on ultrasonic flowmeter

(57) A clamp-on ultrasonic flowmeter has a pair of ultrasonic transmitting-receiving devices. Each device is composed of a ultrasonic propagating element in the form of wedge having a bottom surface and a slanting surface extending from one edge of the bottom surface at an acute angle, and a ultrasonic transducer attached on the slanting surface. The ultrasonic propagating element is composed of a first ultrasonic propagating mem-

ber having on its bottom surface a number of planes aligned in parallel with the slanting surface on which the ultrasonic transducer is attached and a second ultrasonic propagating member of elastic or plastic material, so as to propagate ultrasonic wave emitted by the ultrasonic transducer onto the bottom surface of the ultrasonic propagating element at an angle perpendicular to the slanting surface.

FIG. 1

